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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.            | CONFIRMATION NO. |
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| 09/682,040  | 07/12/2001  | Raman Chandrasekar   | 1018.134US1                    | 6976             |
| 41505   | 7590        | 03/29/2006           |                                |                  |
| WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)<br>ONE LIBERTY PLACE - 46TH FLOOR<br>PHILADELPHIA, PA 19103 |             |                      | EXAMINER<br>AL HASHEMI, SANA A |                  |
|   |             |                      | ART UNIT                       | PAPER NUMBER     |
|   |             |                      | 2164                           |                  |

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental  
Notice of Allowability**

Application No.

09/682,040

Examiner

Sana Al-Hashemi

Applicant(s)

CHANDRASEKAR ET AL.

Art Unit

2164

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/23/06.
2. ☒ The allowed claim(s) is/are 1-3, 5, 8, 10-11, 14, 28-30, 34-35, as renumbered 1-13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**Supplemental**  
**DETAILED ACTION**

1. Claims 1-3, 5, 8, 10-11, 14, 28-30, 34-35, as renumbered 1-13 are allowed. Claims 4, 6-7, 9, 12-13, 15-27, 31-33 are canceled.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Kenneth R. Eiferman on February 23, 2006.

Please cancel claims 4, 6-7, 9, 12-13, 15-27, and 31-33.

4. Please replace claims 1-3, 5, 8, 10-11, 14, 28-30, 34-35:

1. (currently amended) A method implemented at least in part by a computer for refining a user query, the method comprising:

grouping a plurality of terms into a search concept, the search concept being a category that represents a clustering of the terms;

examining a query log to determine to a number of times that each of the terms appears within queries stored in the query log; [and]

calculating a relative popularity for the search concept by adding the number of times that each of the terms appears within the queries stored in the query log, whereby the relative popularity is calculated relative to at least one other search concept in a list of search concept.

Art Unit: 2164

receiving a query from a user; and  
mapping the user query to the search concept.

2. (previously presented) The method of claim 1, further comprising initiating, upon the user's request, a preferred query associated with the search concept to provide improved search results.

3. (previously presented) The method of claim 35, wherein the listed search concepts are popular search concepts and wherein their relative popularity can be used to order the displayed list.

4. canceled.

5. (previously presented) The method of claim 2, wherein initiating the preferred search query comprises selecting one of the terms associated with the concept that has appeared a greatest number of times within queries stored the query log.

6-7. canceled.

8. (original) The method of claim 1, wherein the method is performed by execution of instructions stored on a computer-readable medium.

9. canceled

10. (previously presented) The method of claim 34, further comprising automatically initiating a preferred query associated with at least one of the listed search concepts to provide a set of improved search results.

11. (previously presented) The method of claim 10, wherein the set of improved search results comprises one or more sub-sets of the set of improved search results, each sub-set

Art Unit: 2164

associated with one of the listed search concepts and having a number of search results proportional to the relative popularity of the listed search concept.

12-13. canceled.

14. (previously presented) The method of claim 10, wherein automatically initiating the preferred search query comprises selecting, for each of the listed search concepts associated with the preferred query, one of the terms associated with the concept that has appeared a greatest number of times within queries stored in the query log.

15-27 canceled.

28. (previously presented) A system comprising:  
a search concept that is a category which represents a clustering of a plurality of terms;  
and  
a server communicatively coupled with a client at which a user generates a query, wherein the server groups the terms into the search concept, examines a query log to determine a number of times that each of the terms appears within queries stored in the query log, calculates a relative popularity for the search concept by adding the number of times that each of the terms appears within queries stored in the query log, and maps the user query to the search concept, whereby the relative popularity is calculated relative to at least one other search concept in a list of search concepts.

29. (previously presented) The system of claim 28, wherein the server is a search engine and the client is a web browser.

30. (previously presented) The system of claim 28, wherein the server and the client are applications.

31-33 canceled.

34. (previously presented) The method of claim 1, comprising mapping the user query to the at least one other search concepts in the list of search concepts.

35. (previously presented) The method of claim 34, further comprising displaying a the list of search concepts.

***Allowable Subject Matter***

5. The following is an examiner's statement of reasons for allowance: the 37 CFR 1.131 was persuasive. Claims 1-3, 5, 8, 10-11, 14, 28-30, 34-35, as renumbered 1-13 are allowed.

Regarding independent claims 1, and 28, the prior art of record fails to disclose or suggest the claimed provision of: grouping a plurality of terms into a search concept, the search concept being a category that represents a clustering of the terms examining a query log to determine to a number of times that each of the terms appears within queries stored in the query log, calculating a relative popularity for the search concept by adding the number of times that each of the terms appears within the queries stored in the query log, whereby the relative popularity is calculated relative to at least one other search concept in a list of search concept, in conjunction with remaining claim provisions, is not taught or suggested, or rendered obvious over the prior art of record or that encountered in searching the invention.

6. The dependent claims 2-3, 5, 8, 10-11, 29-30, 34-35, being further limiting to the independent claims, definite and enabled by the Specification are also allowed.

### **Comments**

**The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply outside the SIX (6) MONTH statutory period or obtain an extension for more than FIVE (5) MONTHS beyond the date for reply set forth in an Office action. A fully responsive reply must be timely filed to avoid abandonment of this application.**

**Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."**

As allowable subject matter has been indicated, Applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP section 707.07(a).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2164

***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sana Al-Hashemi whose telephone number is 571-272-4013. The examiner can normally be reached on 8Am-4:30Pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sana Al-Hashemi  
Patent Examiner  
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March 20, 2006